

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

Claim 1 (Previously presented): A touch panel device comprising:

a lighting device including a light source, a light guiding part on which light is incident from said light source, and a light guiding and emitting part for guiding light propagated through said light guiding part so as to emit the light as planar light to an outside,

wherein the light to be guided to the outside from said light guiding and emitting part is emitted from a side opposite to a side on which the touched position is to be detected,

wherein said light guiding part and light guiding and emitting part constitute a single optically transparent substrate,

wherein said light guiding part propagates an ultrasonic wave through the optically transparent substrate and senses a change in a propagation state of the ultrasonic wave due to a touch of an object with said substrate so as to detect a position where the object is touched.

Claim 2 (Cancelled)

Claim 3 (Cancelled)

Claim 4 (Original): The touch panel device according to claim 1, wherein
said light guiding and emitting part is a step-like structure formed on said light guiding part.

Claim 5 (Original): The touch panel device according to claim 4, wherein
a formation direction of the step-like structure forms an angle of not more than 32.5° with
respect to a normal direction of a face of said light guiding part.

Claim 6 (Original): The touch panel device according to claim 1, wherein
an optical refractive index of said light guiding and emitting part is not less than an
optical refractive index of said light guiding part.

Claim 7 (Original): The touch panel device according to claim 1, wherein
said light guiding and emitting part is a plurality of protrusions formed on said light
guiding part.

Claim 8 (Original): The touch panel device according to claim 7, wherein
an optical refractive index of said protrusions is not less than an optical refractive index
of said light guiding part.

Claim 9 (Original): The touch panel device according to claim 1, wherein
said light guiding and emitting part is a plurality of grooves formed in said light guiding
part.

Claim 10 (Original): The touch panel device according to claim 9, wherein
a formation direction of said grooves forms an angle of 35° to 55° with respect to a
normal direction of a face of said light guiding part.

Claim 11 (Original): The touch panel device according to claim 1, wherein
said light guiding and emitting part is a plurality of prisms formed on said light guiding
part.

Claim 12 (Cancelled)

Claim 13 (Cancelled)

Claim 14 (Cancelled)

Claim 15 (Cancelled)

Claim 16 (Previously presented): A touch panel device in which an ultrasonic wave is
propagated through a single optically transparent substrate and a change in a propagation state of
the ultrasonic wave due to a touch of an object with said substrate is sensed to detect a position
where the object is touched, comprising:

a light source for emitting light which is to be incident on said substrate;
said substrate guides the light incident on the substrate from said light source so as to emit the
light to an outside, wherein said substrate

is configured so that the light incident on said substrate from said light source is guided and emitted to the outside from a face of said substrate opposite to a face where the touched position is to be detected.

Claim 17 (Cancelled)

Claim 18 (Currently amended): A touch panel device comprising:

a touch panel for detecting a touched position; and

a lighting device including a light source, a light guiding part on which light is incident from said light source, and a light guiding and emitting part for guiding light propagated through said light guiding part so as to emit the light as planer light, ~~directly~~ to the outside of the lighting device,

wherein the light to be guided to the outside from said light guiding and emitting part is emitted from a side opposite to a side on which the touched position is to be detected, wherein

said light guiding and emitting part is a step-like structure formed on a surface of said light guiding part opposite to the side on which the touched position is to be detected.

Claim 19 (Previously presented): The touch panel device according to claim 18, wherein

said touch panel senses a change in resistance of a resistance film due to a touch of an object with said resistance film so as to detect a position where the object is touched.

Claim 20 (Previously presented): The touch panel device according to claim 18, further comprising an adhesive agent layer for bonding said substrate of said touch panel and said light guiding part of said lighting device together.

Claim 21 (Previously presented): The touch panel device according to claim 20, wherein, when optical refractive indices of said substrate, said light guiding part, and said adhesive agent layer are indicated by n_1 , n_2 , and n_3 , respectively, the optical refractive indices n_1 , n_2 , and n_3 satisfy the following conditions:

$$n_1 \approx n_3 \approx n_2.$$

Claim 22 (Previously presented): The touch panel device according to claim 18, further comprising an adhesive agent layer for bonding said touch panel and said light guiding part together.

Claim 23 (Previously presented): The touch panel device according to claim 22, wherein, when optical refractive indices of said touch panel, said light guiding part, and said adhesive agent layer are indicated by n_1 , n_2 , and n_3 , respectively, the optical refractive indices n_1 , n_2 , and n_3 satisfy the following conditions:

$$n_1 \approx n_3 \approx n_2.$$